

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 06112850  
PUBLICATION DATE : 22-04-94

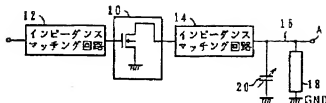
APPLICATION DATE : 28-09-92  
APPLICATION NUMBER : 04257731

APPLICANT : FUJITSU KANTAMU DEVICE KK;

INVENTOR : IMAI ISAO;

INT.CL. : H04B 1/04 H04B 7/26

TITLE : STATIC ELECTRICITY PROTECTION  
CIRCUIT



ABSTRACT : PURPOSE: To prevent a damage to a transmission high frequency amplifier circuit even when a high voltage of static electricity is applied carelessly to an antenna.

CONSTITUTION: A microstrip line 18 is connected between a GND and an output transmission line of a transmission high frequency amplifier circuit 10 and a variable capacitor 20 is connected in parallel with the microstrip line 18. The microstrip line 18 is connected to ground and the length is selected to be  $1/4$  wavelength of a signal with a center frequency at an operating high frequency band. The parallel connection circuit comprising the microstrip line 18 and the variable capacitor 20 has an impedance almost infinite with respect to a high frequency signal and gives no effect on the high frequency amplifier circuit 10 and has nearly a zero impedance with respect to DC, then even when a transmission reception antenna is in contact with cloth of a person or the like and a high voltage of static electricity is applied to the antenna, the charge is discharged to the ground GND through a no loss distributed constant line.

COPYRIGHT: (C)1994,JPO&Japio